XC6136 Series
Ultra-low Power "88nA" Voltage Detector With High Accuracy Detection

TOREX
New Product Leaflet

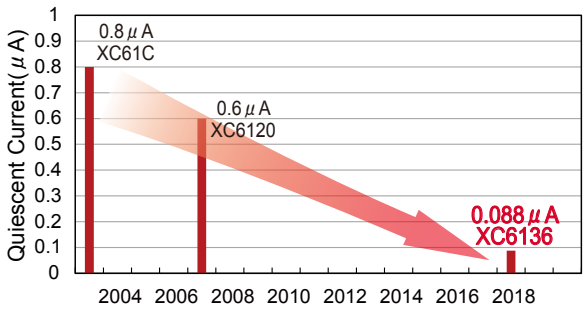
Wearable Device | Smart Meters Energy Harvesting | BLE | Blood Pressure Monitors | Portable Device | Security Cameras | Industrial Equipment | Remote Controller

SALES POINT Nano Power Consumption・High Accuracy Eetection・Small Package !

Quiescent current of 88nA, among the lowest in the world!

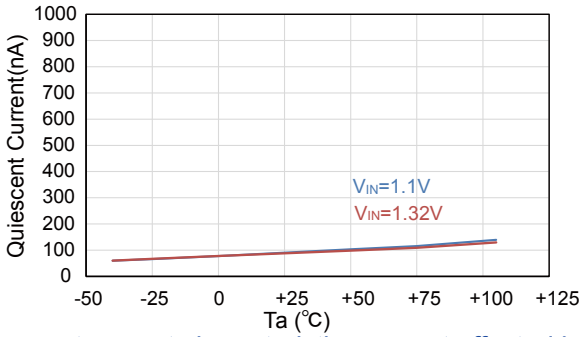
- Ideal for IoT/energy harvesting applications, with ultra-low consumption in a compact package.
- High-precision detection and smooth, low-quiescent current temperature characteristics.
- Functions to prevent unstable operation are enhanced by the inclusion of UVLO (CMOS products).

Path to Achieving Ultra-low Quiescent Current



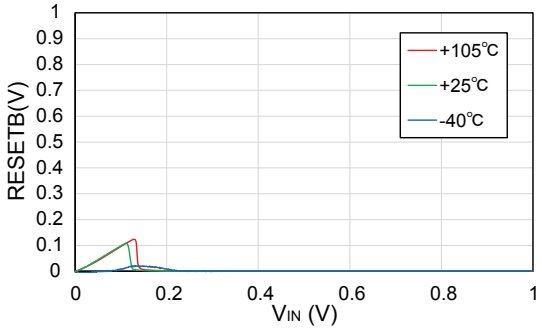
Over this 10-year period,the power consumption was reduced to roughly 1/10 its original level.

Smooth Temperature Characteristics



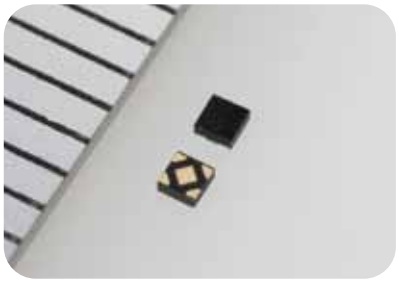
Quiescent current characteristics are not affected by ambient temperature.

Operational Instability Prevention Function



Prevents malfunctions caused by voltage lift at conditions lower than the minimum operating voltage.

Ultra-compact Low-profile Packages



USPQ-4B05(1.0×1.0×h0.33mm)
Ultra-compact, low-profile package ideal for IoT devices. Thin enough to be mounted on smart cards.

FEATURES			
Ultra-Low Power	88nA TYP. (Released V_{DF}=1.2V, V_{IN}=1.32V)	Detect Voltage Range	1.2V～5.0V (0.1VStep)
	91nA TYP. (Detection V_{DF}=1.2V, V_{IN}=1.1V)	Operating Voltage Range	1.1V～6.0V
High Accuracy	±0.8% (V_{DF}≦3.0V, Ta=25℃)	Output Configuration	CMOS or Nch Open Drain
	±1.0% (3.1V≦V_{DF}, Ta=25℃)	Output logic	H level or L level at Detection
	±2.5% (V_{DF}≦3.0V, Ta=-40℃～+105℃)	Undefined Operation Protect(CMOS)	Output Pin Voltage 0.38V (MAX: Ta=-40～+105℃) @Input Pin Voltage＜Minimum Operation voltage
	±2.7% (3.1V≦V_{DF}, Ta=-40℃～+105℃)		
Temperature Characteris-	±50ppm/℃	Packages	USPQ-4B05, SSOT-24, SOT-25
Hysteresis Width	TYPE A/C V_{DF}×5.0% (TYP.)、TYPE B/D 2～28mV (TYP.)	Environmentally Friendly	EU RoHS, Pb Free, H&A Free

RoHS Compliant | Halogen Antimony FREE